

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

- 1-16. (cancelled)
17. (currently amended) An isolated polynucleotide comprising:
  - (a) a nucleotide sequence encoding a polypeptide having cycloartenol synthase activity, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:6 have at least ~~92%~~ 95% identity based on the Clustal method of alignment, or
  - (b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence contain the same number of nucleotides and are 100% complementary.
18. (cancelled)
19. (previously presented) The polynucleotide of Claim 17, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:6.
20. (previously presented) The polynucleotide of Claim 17, wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:5.
21. (currently amended) [A] An isolated cell comprising the polynucleotide of Claim 17.
22. (previously presented) The cell of Claim 21, wherein the cell is selected from the group consisting of a yeast cell, a bacterial cell and a plant cell.
23. (previously presented) A transgenic plant comprising the polynucleotide of Claim 17.
24. (previously presented) A method for transforming a cell comprising introducing into a cell the polynucleotide of Claim 17.
25. (previously presented) A method for producing a transgenic plant comprising (a) transforming a plant cell with the polynucleotide of Claim 17, and (b) regenerating a plant from the transformed plant cell.
26. (previously presented) A chimeric gene comprising the polynucleotide of Claim 17 operably linked to at least one regulatory sequence.

Application No.: 10/607,726  
Docket No.: BB1113 USDIV

Page 3

- 27. (previously presented) A vector comprising the polynucleotide of Claim 17.
- 28. (previously presented) A seed comprising the chimeric gene of Claim 26.
- 29. (cancelled)